

Master 2019

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Measurement and Compensation of Environmental Influences on Polymer Casting Processes in Direct Soling Mechanisms.

ABSTRACT - Masterthesis

This master thesis has been created in cooperation with the DESMA Schuhmaschinen GmbH, a producer of industrial systems for shoe production located in Achim near Bremen. Its subject is the minimization of environmental influences on a DESMA-specific polymer casting process, called DES-flow®. Aiming for less casting defects, the environmental influences on the melted mass as well as the material distribution process were analyzed. The investigations included multiple experiments, carried out using a laboratory system, as well as theoretical estimations.

The main results of this theses are a way deeper understanding of the systems behavior regarding environmental changes as well as a ranked list of destructive influences on the system and suggestions for their minimization.